1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6



place set apart for *tapu* individuals. The space behind the bed, between the back log and the rear wall, was, according to Garcia (14, p. 127), sacred, a place for the gods, and the place where inmates spat (spittle being safe from evil doers here). Bundles of clothing and other articles were slung up to the ridgepole with cords (23, p. 89), and valuables were suspended in baskets in the same manner, the cord sustaining them being passed through a coconut shell to prevent rats from climbing it (24, p. 113). The upper surface of the joist supporting the front eaves of the house served as a shelf, on which small articles were put. Articles were also hung from the small supports that ran horizontally along the inside of the rear wall. Early visitors describe the way in which weapons, utensils, stilts, adzes, drums, skulls, and other things were hung on the walls (16, pp. 159-60; 19, p. 129). Small wooden chests *(tifa, umete)* served as containers of articles of value. Garcia (14, p. 129) and Krusenstern (16. pp. 159-60) describe, in one end of the houses of the wealthy, a small partition of bamboo to protect such sacred objects as the bier of a recently deceased ancestor. A part of the interior furnishings of a sleeping house was frequently an empty coffin, waiting for the body of its still living owner or a coffin containing a corpse slung up under the ridge pole. Lower jaws of hogs were observed projecting from beneath the front eaves of a house at Pua Ma'u, on which were formerly hung containers holding the *popoi* of the *tapu* members of the household. These were the jaws of the hogs that had been eaten at the feast of consecration of the house when it was new. The interior of the house was lighted at night by means of kernels of the candlenut *(ama)* strung on the midrib of a coconut leaf or on a strip of bamboo. This candle was stuck into the side of the house, and a vessel was placed beneath to catch the ashes.

352 [778] [764] [342] [354]

### The Fata'a

The structure restricted to the use of *tapu* men was the *fata'a (fata'a moe, nahua)*. This according to accounts on Hiva Oa, consisted of a frame, the dimensions of which were about 15 by 20 feet, raised on posts from five to twelve feet high, over which was a roof or house. This structure stood close by the platform of the common sleeping house. The top of the staging, or floor of the house, was made of planks or logs. On it was a fireplace made of earth and stones, where the food of the *tapu* members of the household was prepared. The *fata'a* served also as a storehouse for the food of these *tapu* persons. Old men, who no longer associated with women, and hence were always *tapu*, lived constantly on the *fata'a*, sleeping there. Women were never allowed to enter but only men and boys. The floor was reached from the ground by means of a ladder, made, according to my native informant, of rungs lashed on poles with sennit.

342. 784 [251] [417 284]

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constituted as important a part in the accomplishment of enterprises as the actual practice itself. In making a new thing such as a coffin, a canoe, or a house, a most important stage consisted in the consecration of the new thing after its completion by the recitation of the creation or generation chant, which linked the new product of man's handicraft with the beginnings and successive stages of creation, uniting the new thing made with all that had gone before, from the beginning of the world. In the work of food collecting, fishing, and harvesting, the final stage consisted in the offering of first fruits—a very important part, as it was instrumental in leading to further successful accomplishments of the same work. Such offerings of first fruits relieved the foods of *tapu* by giving the gods their share, thus releasing the rest for human consumption.

Lastly, the accomplishment of undertakings of every kind was celebrated always with feasting and merrymaking. These periods of consecrated activity were always followed by long periods of inactivity and repose.

## WOODWORK

The materials utilized in woodwork were beams, boards, and posts of wood, and cords to lash them together. The tools employed were stone adzes, stone chisels, mallets, and the pump drill. Most of the cord (*aho*) and rope (*tou'a*) was sennit cord, made chiefly from coconut fiber (*kaha*)—*pu'u kaha* being the generic term for sennit cord bindings and *ke'e kaha* and *kaha patapata* terms applied to such cord when used in ornamental lashings. Each lashing had its name, as *humu o Tana-oa, Fiti nui, Fiti peka,* and professionals (*tuhuna pehe*) devoted themselves to adapting the designs, which were taken from string figures (*pehe*—see Games), and to applying them in ornamental lashings. In these lashings cords of different colors were combined, some of them being of the natural reddish-brown color and others stained in water, colored with red earth, or according to one informant, dyed with the juice of the fruit of the *pu'u peni* (?); some were dyed yellow with *ena* or black by being buried in mud, or (according to Linton) by being soaked in juice from the bark of the *maii* (*Terminalia sp.*) tree, or were smeared with a paste blackened with candlenut soot; and some were made white by soaking in water in which white earth (or perhaps lime) was mixed. The manufacture of cord for nets has been described in connection with net-making. (See Fishing.)

According to Linton's information, three-, four-, six-, seven, and eight-strand rope was made, the three-strand (*tou'a*) and the four-strand (*fofii*) being the most common and the seven-strand being used for certain ceremonial purposes. It may be that the ceremonial significance of seven prevented the use of the seven-strand cordage for general purposes. In

1: Handy E-5 (1920-1921)1923 OX6 Marquesas OX6



501 bamboo sewed to the edge of each plank, to keep in a stuffing of oakum, made of the coconut shell also.

Over the seams between the sideboards and the hull, both inside and outside, were strips made of wood or bamboo (*teka, vaho, teka oto, ta'i, patua*). Caulking of the seams at this place and at the point of attachment of bow and stern-piece was done usually with coconut cord fiber (*kaha*), or with feathers (*hu'u manu*). Langsdorff (18, p. 173) describes caulking with moss over which was rubbed resin from the breadfruit tree. Bulk-

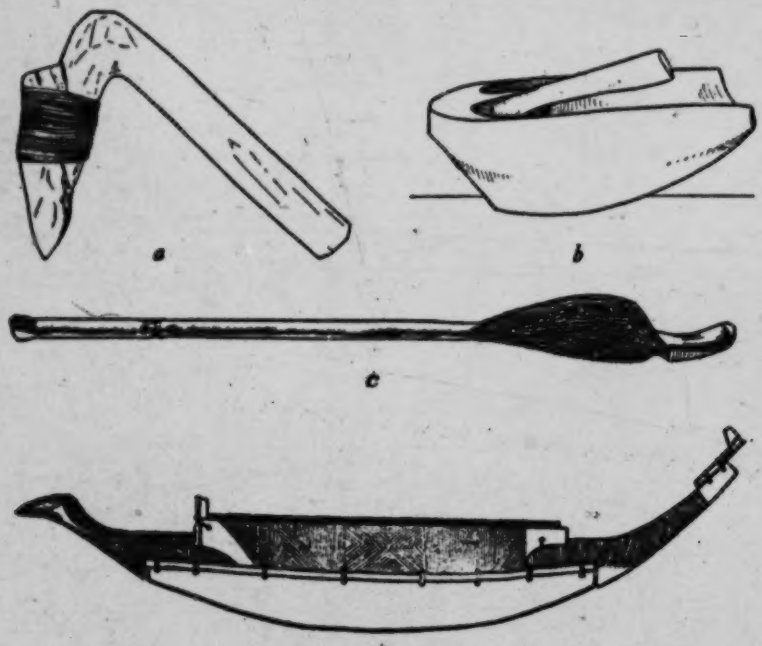


FIGURE 16.—Canoe and implements: *a*, adz; *b*, bailer; *c*, paddle; *d*, canoe.

heads in the body of the canoe are described by Porter. Seats (*papa tau*) for paddlers rested on an inner strip (*teka oto*) which covered the inboard seam between the sideboard and the hull. These strips were bound and held in place by sennit. The two rods (*kiato, hoa*) supporting the outrigger were usually fau poles; Marchand (22, p. 131) describes rods of bamboo. The supporting rods passed across the top of the canoe, being lashed to the top of each gunwale, or sideboard, by means of sennit that passed around the rod and through holes in the board. These lashings were ornamental

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342 531 An interesting feature of the house post carvings is the occasional use of toothed lines suggestive of those used by the Maori in many of their carvings. Examples of the use of such lines are shown in figure 6, *c*, *e*.

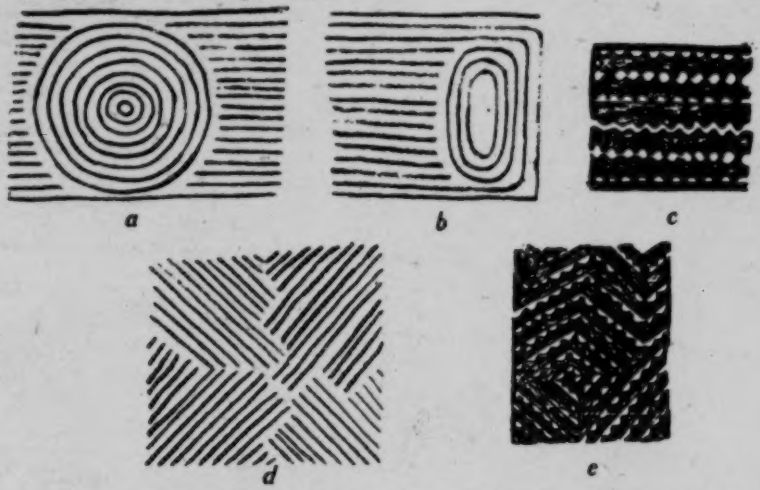


FIGURE 6.—Designs carved on house posts: *a*, circles superposed upon straight vertical grooves; *b*, ovals superposed upon straight vertical grooves; *c*, toothed lines; *d*, woven design; *e*, spiral with toothed lines. Reproduced from rubbings.

It is easy to conceive of the development of house post carving from an appreciation of the esthetic value of the adz marks left after the dressing of the timber. In many objects which are not actually carved these marks are arranged with evenness and regularity and give a decidedly ornamental effect. What may be considered as a intermediate stage between such adzing and actual carving was observed in a set of end posts from Nuku Hiva and another from Fatu Hiva. The inner surface of these posts had been adzed into a series of horizontal grooves six to eight inches wide with a maximum central depth of one-half inch, the ridges separating the grooves being narrow and sharp. The transition from such ornamental adzing to the simpler geometric designs would be easy.

## ORNAMENTAL LASHINGS

342 531 284 Ornamental lashings were probably more commonly used as decorations for the house than carvings, but because of the perishable nature of the materials few examples have survived. The material employed for lashings was a

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



The material employed for lashings was a flat three-strand sennit plaited from coconut fiber. This fiber was obtained from both the husk and the leaf sheath. The sheath fiber was considered the better, probably because its greater length rendered possible a smoother plait. The only colors seen were a dull black and the natural red brown, but Stewart (59, p. 236) mentions the use of yellow and white sennit as well. The plaiting and dyeing of this sennit have been described on pages 378 and 379.

The only complete set of ornamental lashings seen in the Marquesas was in an old house in the valley of Atu Ona, Hiva Oa. The lashings were applied to the juncture of the three main rafters of the front roof with the ridge pole, to the junctures of all the rafters of the front and rear roofs with the lowest crosspieces, and to the junctures of the main rafters of the rear roof with a squared beam which ran along its under surface at the height of the top of the front wall. This top beam probably did not exist in really primitive structures. According to informants, ornamental lashings were used for the attachment of the front posts to the stringer, of the main rafters of the front roof to the stringer, and of all the cross poles of the roof to the rafters. Stewart (59, p. 236) says that the front posts were "generally neatly hewn and ornamented by braids of sennit . . . tied on in horizontal stripes in diamonds or in checks, in a pretty and fanciful manner." As the front posts in Hiva Oa, Tahu Ata and Fatu Hiva were usually carved this was probably a Nuku Hivan practice. The posts of houses in Nuku Hiva are also said to have sometimes been covered with white tapa under the lashings.

A considerable number of lashing designs were employed but their use has been discontinued for many years and only two patterns were seen. These appeared on different parts of an old house in Atu Ona. According to informants the designs used for house lashings were made by a special *tuhuna* who originated them from string figures. Different designs were used for the front posts, the rafters, and for other structural parts. Another special *tuhuna* put them on. The designs seen were ovals with a black center and brown rim, used at the points of attachment of the small rafters and the cross pieces of the front and rear roofs (Pl. XL, *F*), and crosses with a band on either side, used at the juncture of the main rafters with the lowest crosspiece. At the juncture of the central rafter of the front roof with the ridge pole two of these designs were placed side by side.

### Methods of Making Lashings

The methods of making lashings may be described as follows:

For the oval lashings two cords were used, one of black and the other of brown sennit, both being carried from the left along the top of the crosspiece. The black cord was passed twice around the rafter to form a double hitch whose upper and lower loops were respectively above and below the crosspiece. The cord was then turned back to the left, carried up the

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas ÔX6



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531
284
left side of the juncture of the rafter and crosspiece, and around the rafter just above the crosspiece from right to left. The half hitch was tightened and the strand brought into a vertical position on the outside of the crosspiece. The loose end was then passed across the vertical strand as close to the rafter as possible, down its right side, across it again at the bottom, and behind the rafter from left to right. The flatness of the sennit cord prevented this loop from slipping over the vertical strand. The cord was carried across the original strand and the first loop as close to the rafter as possible, up the left side of the original strand, and across the original strand and first loop at the top, close to the rafter. The cord was then passed behind the rafter from right to left. This was repeated until the oval had a width of five strands at the center. The end of the cord was then at the upper left hand corner of the figure. It was passed across the lashing in front of the rafter, down the right side of the lashing behind the crosspiece, across its bottom and up its left side behind the crosspiece. This completed the black part of the figure. The strands were pulled taut and the black cord carried on in front of the rafter to the next rafter to the right.

The brown cord, coming from the left, was brought across the top of the black lashing in front of the rafter, down its right side behind the crosspiece, across to the left, and around the rafter from left to right. The end was then at the lower right hand corner of the figure. Two loops up, around the rafter, and down on the opposite side of the figure were then made, the method being the same as that used with the black cord. This gave to the oval a width of nine strands, the two outer strands on each side being brown and the rest black. The cord was then carried across to the left, up the left side of the lashing behind the crosspiece, and across the lashing again at the top, with the end carried on to the next rafter on the right.

The cross lashing was much more complicated. It can be made as follows: Bring the black cord from the left along the top of the crosspiece, pass it around the rafter from right to left, down over the crosspiece, around the rafter from left to right, up the left side of the rafter behind the crosspiece, and through the upper loop. Tighten lashing, pass the end down the left side of the lashing behind the crosspiece and up, over the front of the crosspiece, placing it close against the original outside strand on the left. Pass the end downward behind the rafter diagonally to the right, bringing it out at the lower right corner. Bring it up over the crosspiece diagonally to the left, around the rafter from left to right and diagonally down over the crosspiece right to left. Carry it behind the rafter from left to right, across the front of the rafter, and up the left side of the lashing behind the crosspiece. Wrap twice around the crosspiece and pass the end around the rafter below the crosspiece from left to right. Bring it up diagonally over the crosspiece from right to left, placing the cord close against the left side of the first diagonal. Pass the end around the rafter left to right, and bring it down over the crosspiece diagonally to the left. Pass around rafter left to right, across to left in front of rafter, and up left side of lashing, behind crosspiece. Leave black.

Bringing the brown cord from the left pass it over the black lashing below the crosspiece, up the right side of the lashing, back to the left, and under itself from the rear. Pull the loop tight. Pass the brown cord twice around the crosspiece, taking care to have these strands lie on the left of the four black strands already in position and close against them. Pass the end around the rafter above the crosspiece from right to left, diagonally down over the crosspiece from left to right, around the rafter from right to left, up over the crosspiece diagonally to the right, and around the rafter from right to left. Leave brown.

This finishes the first half of the figure, and should give a vertical band of six strands, the two strands on the left being brown, which has on its right an X figure with arms three strands in width, the first strand on the left side of each arm being brown.

Take up the black cord, which was carried up the left side of the lashing behind the crosspiece. Carry it across the lashing in front of the rafter, down the right side of the lashing, across the lashing again, and up behind the rafter diagonally left to right, the end emerging at the upper right hand corner. Bring it down over the crosspiece diagonally right to left, around rafter left to right, and up diagonally over the crosspiece right to left. Pass it down behind the rafter diagonally left to right. Wrap it twice around the crosspiece. Carry the end across the lashing below the crosspiece to the left, and up diagonally behind the rafter, emerg-

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ing at the upper right corner. Bring it down over the crosspiece diagonally to the left, around the rafter left to right, and diagonally up, right to left. Pass it down behind rafter diagonally, emerging lower right corner, and wrap it twice around the crosspiece. Carry end across lashing below crosspiece to the left, up the left side behind the crosspiece, and across the lashing to the right, in front of rafter. This completes the black part of the lashing.

Take the brown cord, which has been carried around the rafter from right to left above the crosspiece, and carry it down over the crosspiece diagonally from left to right. Pass it around the rafter right to left, and diagonally up over the crosspiece left to right. Bring it down behind the rafter diagonally right to left, across the lashing below the crosspiece to the extreme right edge of the figure, and wrap twice around the crosspiece. Make one complete turn around the rafter below the crosspiece from right to left, carry up the right side of the lashing, across to the left, down left side and carry on to next figure on right.

The complete lashing should consist of two vertical bands each of six strands, the two outer strands in each band being brown and the four inner black. Between these there should be an X whose arms are six strands in width, the two strands along the edges of either arm being brown and the four central strands black.

## OTHER FORMS OF DECORATION

No indication of the use of paint in the decoration of house timbers was found, and no reference was made to it by informants. Du Petit-Thouars (48, p. 347), however, speaks of seeing in the island of Tahu Ata, a small house, with posts painted red and yellow, which sheltered a corpse. This form of ornamentation was probably never used for dwellings.

Informants in Pua Ma'u, Hiva Oa, stated that men's houses belonging to chiefs were often ornamented with the lower jaws of wild pigs, several of them being attached to the inner side of the front stringer at regular intervals. The jaws were placed angle up, with the tusks projecting below the stringer. These tusks were useful as well as ornamental, serving as hooks on which to hang small objects.

The early accounts of the Marquesas contain several references to prepared skulls which were used to decorate the houses of victorious warriors, but no details of the arrangement are given and as such trophies were also worn as ornaments it seems probable that they were simply hung up in the house and not incorporated in the structure.

## HOUSE FURNISHINGS

Although furniture, in the European sense, was lacking, miscellaneous objects were to be found in any inhabited Marquesan dwelling. The bed space was covered with mats; wooden bowls and boxes lay about; calabashes and baskets hung from the walls or ridge pole; and tools and weapons were hung up or were thrust into the thatch. Porter (49, p. 113) says that there were "stands, calculated to hang different objects on, so contrived that the rats could not get them" and "cradles for their children, hollowed out of a log and made with great neatness." No other reference to these cradles has been found. From the ridgepole hung a number of bundles containing new tapa, or the gala dresses and

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



396 practise, which involved much unnecessary labor, is given by Porter (49, pp. 101-
501 102). He says:

[422] Each piece, and indeed each paddle has its separate proprietor. To one belongs the piece projecting from the stern, to another the part forming the bow. The pieces forming the sides belong to different persons and when a canoe is taken to pieces, the whole is scattered throughout the valley and divided, perhaps, among twenty families. Each has the right of disposing of the part belonging to him, and when it is to be set up each brings his piece with materials for securing it. The setting up of a war canoe goes on with the same order and regularity as all their other operations.

Mention of this curious system of ownership is also made by Desgraz (15, pp. 281-282) but as his book appears to be a little more than a compilation from earlier sources, this can hardly be taken as a verification.

It seems certain that there must have been a definite order in which the various sections were placed in position, but no exact information was obtained on this point. The structure of the canoes, however, partially indicates the following sequence:

The first step must have been to arrange the pads which took the place of caulking between structures or sections. There were four of these, two being placed along the sides of the underbody and one at either end. The side pads consisted of two thick flat ropes, of the same length as the underbody, each of which was plaited from three strands of coconut husk fiber. Cellular tissue of the husk was left adhering to this fiber, probably with the idea of filling the interstices and making the finished seam more nearly water tight. These ropes were laid along either edge of the underbody, being held in position by continuous bark strings which fastened them to the underbody at each lashing hole. The end pads were made from a number of the fiberous leaf sheaths of the coconut which were spread out flat with their upper ends resting on the top of the underbody and their lower ends bending down over its flat vertical bow and stern. They do not seem to have been attached to the underbody in any way.

The next step was to place the bow and stern pieces in position, and then the side planks. Whether the bow and stern pieces were attached before the side planks were put on is uncertain, but it seems probable that the whole superstructure was lashed to the underbody in a single continuous operation. In the models the lashing of each side is done with a single continuous line, beginning at the bow.

● [284] The lashings were of broad three-plait coconut fiber cord considerably heavier than that used for house lashings. This was passed several times through the upper and lower lashing holes, outside of the strips, the outer side of the lashing being flat, the full width of the hole, and only one cord thick. According to one informant a large wooden needle, with the point barbed on one side was used to facilitate passing the cord in and out. (See section on Miscellaneous Tools.) The upper ends of the side planks were attached to the bow and stern pieces by small lashings, each of a single piece of cord tied on the inside. The inside lashings are said to have been ornamented on some canoes with designs derived from string figures.

## CAULKING

501
396 The lashings of the underbody and superstructure did not completely fill the
314 triangular holes provided for them, and the openings were caulked with pieces of
[237] coconut husk wadded up and beaten in with a wooden mallet and pointed stick. (See section on Miscellaneous Tools.) The seams at the ends of the canoe were calked with feathers, beaten in. [48]

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



412 chisels is much less satisfactory. It is certain that the Marquesans, like the Maori, did employ hafted chisels, but no old specimens are now extant.

### Adz Haftings

Only three hafted adzes were seen and one of these was made by the informant who made the chisels. The other two specimens were of considerable age, and all three agreed closely in form. The blades in all three specimens were of *toki kouma* type. The use of other forms of blade may have necessitated slight changes in the form of the haft.

[824] Adz handles were usually made of fau wood, care being taken to select old trees as the young shoots are too soft and brittle for the purpose. In one chant the use of *noni* roots is indicated and in another that of *mio* wood (Handy personal correspondence). A branch and a section of the trunk immediately above it were detached, and the natural hook thus obtained was worked down into a more or less smoothly rounded elbow having the two sides of unequal length. The long arm served as the handle and was made from the branch, the short arm to which the blade was attached, was made from the trunk. The entire haft was thickest at the curve of the elbow, the diameter of the two arms gradually decreasing toward their ends. A socket for the blade was cut in the outer surface of the short arm. The upper end of this socket was at about the level of the inside of the curve at the elbow. The form of this socket naturally varied with that of the blade it was intended to accommodate. In all the specimens seen, the socket was flat, running the entire width of the handle and being cut squarely across, or only slightly rounded at the upper end, but many of the blades collected must have required a socket semicircular or triangular in cross section, and tapering toward the upper end so as to fit the contour of the blade accurately.

412 284 The tang was wrapped in two or three thicknesses of tapa, which were so arranged that they intervened everywhere between the stone and the lashings, and socket. The purpose of this wrapping was to increase the friction of the lashings and keep them from loosening. The lashings themselves were made of [824] three plait coconut fiber cord of medium weight, and although carefully laid on were not ornamental in the specimens seen. According to informants ornamental [531] lashings of red and black sennit were used on at least some special adzes. (Handy, personal correspondence.)

The arrangement of the lashings in two specimens was very simple, consisting of a single cord beginning at the lower end and passing round the blade and haft. The loose lower end of the cord was carried back up the inner surface of the haft and held in place by the subsequent turns of the lashing. The upper end was thrust down under the two or three uppermost laps on the inner surface

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of the haft, brought out, and pulled taut. In the third specimen, which was made by the Atu Ona informant, the lashings were laid on in alternate diagonal loops beginning at the bottom. These loops crossed each other along the line of the middle of the tang, giving an ornamental effect. The last two binding loops at the top were horizontal, while two more loops were passed around the haft above the blade. The end was made fast by tucking it under the last few turns of cord on the right side. (See Pl. XLVIII, *A*.) The maker insisted that this form of lashing was the ancient one and it is probable that several forms of ornamental lashing were originally in use. One of these, mentioned in a chant for the making of a boy's first adz, was called the ***humua tane oo***, and was probably derived from a string figure of the same name. (Handy, personal correspondence.)

Adz blades were rarely if ever set at right angles to the handle, the included angle in modern specimens being 70 degrees or less. The handles of ordinary adzes were short, those used at the present time are commonly less than a foot long, but blades used for heavy work, such as roughing out canoes were formerly provided with long hafts. In Nuku Hiva an adz with a four foot handle is said to have been used for this purpose. (Handy, personal correspondence.)

The adjustable socket, common in Micronesia and in some parts of Melanesia, seems to have been unknown in the Marquesas, although it was known and used to a limited extent in Hawaii. It is lacking in other parts of Polynesia, and the Hawaiian examples are probably referable to a Micronesian influence.

### Chisel Hafting

No specimen of the ancient Marquesan chisel hafts was found, and the following description is based on information obtained in the group and upon two reproductions made by Hapuani, of Atu Ona, Hiva Oa. In both these reproductions the handle consists of a straight rectangular stick of wood between 10 inches and 11 inches long, 1 inch wide, and ¾ inch thick. The wood in one is fau, in the other temanu. A socket for the blade is cut on one side of the lower end of the shaft. When in position the blades project beyond the handle for about two-thirds of their length. The lashings are of sennit, arranged as in the more elaborate form of adz lashing, except that the cord is passed around the handle several times above the socket. (See Pl. XLVIII, *B*.)

### Use of Adzes and Chisels

No stone adzes have been used in the Marquesas for many years, but as the form of the modern iron-bladed tools is almost identical with that of the ancient ones it seems probable that the method of use was the same. At the present time every skilled workman owns two or more adzes, at least one of which has a

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



415 286 A large loop was first formed, one end of the cord being tied and left at *A*. (See fig. 7, *A*.) The loops *abc*, *cde*, and *efg* were then made in the order named. The direction was then reversed and the loops *ghjf*, *fkd*, and *dlb* formed. The direction was then again reversed and the loops *bmnl*, *lok*, *kpj*, and *jgm*[1] made. From *m* the cord was carried to *h* and thence to *a*, where it was knotted in beside its other end. The points *n*, *o*, *p* and *q* projected above the top of the *hue* and served for suspension. The dimensions of the different meshes are: *a* to *c*, 4½ inches; *a* to *b*, 4½ inches; *b* to *l*, 6¼ inches; *l* to *n*, 5 inches. The mesh, with the exception of the outermost loops, is drawn to scale. The knot employed is uniform except at the points *h* and *a*. It is a complicated wrap knot for which no name is known.

The net of *hue* No. 2 on the same plate, although superficially resembling that of *hue* No. 1, is made on an entirely different principle. (See fig. 7, *B*.)

The netting was not begun with a ring, the course of the cord being *a*, *b*, *c*, *a*, *d*, *e*, *f*, *g*, *h*, *j*, *f*, *k*, *d*, *l*, *c*, *l*, *h*, *b*, *g*, *e*, to *a*. Here the two ends are spliced together into a single cord of the size used throughout and tied about the line *cd*. A loop of cord was passed through the outermost meshes at *l*, *m*, *h* and *j*, to serve as a handle, its ends being tied together in a heavy knot. The mesh sizes are: *a* to *b*, 4¼ inches; *a* to *d*, 5 inches; *d* to *l*, 7½ inches. Two types of wrapped knots were used in different parts of the net.

[284]

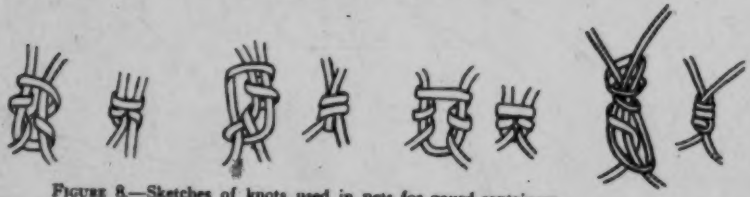

FIGURE 8.—Sketches of knots used in nets for gourd containers.

The widely divergent technique of the two specimens would seem to indicate a considerable variety for these objects in ancient times.

415 Gourd *hue* were normally provided with wooden covers, which were all made according to a fixed pattern. To one ignorant of its use such a cover would appear to be a small squat broad mouthed jar, with a rounded bottom, flatly convex to hemispherical body, a short neck whose sides sloped inward slightly toward the top, and a wide flat shoulder whose upper surface sloped inward and downward to the base of the neck. When used as a cover, the jar was inverted, the neck fitting into the orifice of the *hue*, the shoulder resting upon its top. The [591] body of the cover rose above the *hue* as a small dome, and was frequently carved, the decoration consisting of two tiki faces placed opposite each other. The space above and between these faces was filled with shallow parallel grooves running continuously from edge to edge. In spite of their form, *hue* tops appear never to have been used as separate containers, and they were probably hollowed only for the sake of lightness. (See Pl. LVIII, *F*.)

[1] [this should read jqm, in light of illustration on page 357. [98] —Analyst]

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



283 banana stumps were beaten until the soft parts and fiber separated. The fiber
824 was cleaned, washed and dried, and then rolled into cord by the process just described for pineapple fiber. The only remembered use of this cord was in the making of *pehe* or string figure.

Jardin (33, pp. 32-59) mentions the use of certain other fiber plants. No accounts of these were obtained from the natives but the information appears to be reliable. The species are: *pakoko* (*Phaseolus amaenus*) of which Jardin says (33), "The flower shoots are very flexible; the natives make from them lines for catching fish;" *papa*, an unidentified legume, which, according to Jardin, "serves like the *phascolus amaenus* for the making of threads;" and *pute* (*Pipturus propinquus*) of which the same author says, "The natives use its branches, which are very flexible, to make large ropes."

Other materials, which can scarcely be classed as fiber, were tapa, and a variety of long grass, unidentified, called by the natives *mauomatito ne tetahia*. The tapa was sometimes twisted into strings for the suspension of ornaments, but had so little tensile strength that it was usually reinforced with a strand of coconut fiber about which the tapa was wound. Strips of grass are said to have been plaited into cords which were used by girls in a game, but no more exact information could be obtained.

284 A discussion of knots and splices belongs under the general head of cord-
177 age and fiber, but it is quite impossible to distinguish at the present time between native forms and those of European origin. The Marquesas became at a very early time a regular port of call for whalers and a number of the natives served and still serve as sailors on European ships. It is not surprising, therefore, that they soon acquired a knowledge of all the European knots and splices and have for many years used them as skillfully as any white sailor.

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534 [531] the diameter seems to have been uniform. The bodies of at least 90 per cent of the drums were decorated with a series of shallow horizontal grooves, apparently made with an adz. In a few drums the upper part of the body was decorated with simple angular-geometric designs of the sort used on house posts. It is possible that the bodies of some of the temple drums were smoothly finished. The lip of the drum was somewhat recurved, as in round bowls of normal type, the greatest width of the interior being one to two inches below the rim. The bottom of the excavation was bluntly conical. The thickness of the walls varied in different specimens but rarely, if ever, exceeded one inch.

The body and base of the drum were hewn in one piece. The interior of the base was cut away and its sides were pierced at intervals so that the body seemed to rest upon six to eight thin, flat legs connected at the bottom by a broad ring. The ring was commonly decorated [531] with a few broad shallow horizontal grooves. As a rule, the legs of the drum were smoothly finished, but a few seem to have been decorated with simple angular designs. Through the top center of each leg two holes were pierced, one above the other, for the attachment of the hoop lashings. In drums of ordinary size the base was wider than the body and tapered inward toward its top, but in the temple drums the diameter of base and body seems to have been uniform.

A wooden hoop made of a split withe encircled the base of the drum just below its juncture with the body. It was attached to the drum by means of ornamental lashings of small [531] sennit, which were passed through the holes and around the sides of the legs. In all the drums seen natural color sennit was employed and the design was a simple diamond. In one specimen tufts of human hair had apparently been laid upon the outside of the hoop before the lashings were put on.

534 284 [231] The drumhead was made of thin shark skin, put on wet. In the edges of the skin, which extended for some distance down the sides of the drum, vertical slits were cut at regular intervals. A heavy cord of flat braided sennit was passed several times around the drum, threaded in and out through the slits in the skin. This lashing was so arranged that there was always an equal number of strands inside and outside. Thus, if we designate four successive slits in the skin as A, B, C, and D, the cord on the first circuit would lie outside between A and B, inside, against the wood, between B and C, and outside again between C and D. On the second circuit it would lie inside between A and B, outside between B and C, and inside again between C and D. In this way a ring of sennit was formed around the lower edge of the head. The arrangement of the lashings connecting this ring with the wooden hoop on the base of the drum is clearly shown on Plate LXXII, *A*. The lashings consisted of a series of loops of heavy sennit cord. The upper ends of the cord passed under the outer lashings of the ring on the outer sides of each pair of slits. The cords forming the outer sides of adjoining loops thus crossed each other at the slits and were carried down nearly parallel. For approximately the lower third of their length the cords were united into a single strand by wrappings of sennit. According to one informant, carved tubes of human bone were sometimes threaded upon the paired cords just above the sennit wrapping. When it was necessary to tighten the lashings these tubes would be forced upwards, drawing the cords together, thus increasing the tension. A different method of tightening the lashings appears to have been employed ordinarily. A number of turns of ribbon-like sennit were wrapped around the body of the drum about midway between the ring and hoop. When these were drawn taut the vertical loops of sennit were forced inward against the body of the drum, tightening the head.

534 Stewart (59, p. 258) says that the small drums used at dances were made of kou wood, and had a small hole in the center of the bottom. He also says (59, p. 257) that the heads of the temple drums were made of ray skin instead of shark skin. No drums with a hole in the bottom were found, but Stewart is a thoroughly trustworthy observer and his statement is sufficient to establish their existence.

Even the large temple drums appear to have been beaten with the hand. Because of their great length they were placed on the ground beside special platforms on which the drummers stood.

7: Linton E-5 (1920-1921) 1923 OX6 Marquesas OX6



## TRUMPETS

As Marquesan musical instruments, trumpets (*pu*) stand next in importance to drums. They are made of *mio* wood and of Cassis and Triton shells. 534 321

The body of the wooden trumpet was a simple tube tapering toward the upper end. (See Pl. LXXII, *D*.) Dimensions of an average specimen are: length, 1 foot, 9 inches; diameter at mouth, 6¼ inches; diameter at upper end, 3 inches. The walls vary in thickness from slightly less than ½ an inch at the lip to approximately 1 inch at the upper end. A mouth piece of bamboo, 8 inches to 1 foot in length and approximately 1 inch in diameter, was fitted into the small end of the tube. It was not attached in any way, and when the instrument was not in use was usually removed and placed inside the wooden part. A few wooden trumpets were decorated with carving; an unfinished specimen in the Bishop Museum bears several designs which appear to have been copied from tattooing.

The trumpet was blown in the same manner as an European bugle. The trumpets still in use give a remarkably clear and penetrating note. One old informant stated that trumpets of this sort were blown by returning fishing parties to summon the villagers to the shore, but no other uses were mentioned.

Two varieties of shell trumpet were used by the Marquesans. The smaller, which appears to have been somewhat rare, was made from the shell of *Cassis rufa* by grinding away the apex of the whorl. A Cassis shell trumpet [825] found in a burial cave in Atu Ona, Hiva Oa, can still be blown and gives a clear but not very loud note. (See Pl. LXXII, *B*.)

Most Marquesan shell trumpets appear to have been made from the large shell of *Triton tritonis*. The larger shells of this variety were brought up by [825] divers from considerable depths and seem to have been highly valued.

To prepare the shell for use a hole was ground in the side of one of the whorles a short distance below the tip of the shell, and above this a mouthpiece, made of a small gourd, was attached with breadfruit gum. Handy was informed that the mouthpiece was made of bamboo, but this practice certainly was not general. Langsdorff (38, p. 164) says that the mouthpiece was made from an oil nut, but he is probably in error, for the *oma* nut is too small to have been used in this way.

Triton shell trumpets were usually provided with a band of sennit which served for decoration and also for the attachment of a suspension cord. (See Pl. LXXII, *C*.) A hole was cut in the farthest projection of the lip by sawing a transverse groove in the outer surface of the shell until the channel was reached. A number of small sennit cords were passed through this hole, along the top of the shell, then around the body of the shell a short distance below the apex, and back to the hole again. The separate strands were laid side by side and fastened together at intervals of three or four inches by transverse cords of sennit applied as in simple wrap weaving. There was thus a loop around the apex of the shell and a broad band running longitudinally from the loop to the lip. At either end of the broad band were placed additional lashings from which short loops were made. A long thick cord made from twisted white tapa passed through these loops and served for the suspension of the shell. A tassel, attached just above the lip end of the band, consisted of a number of tresses of human hair which were fastened to strands of sennit in the same manner as in hair ornaments. A tube of human bone, carved into a tiki, was threaded over the sennit cords and concealed all but their inner ends. One of the trumpets examined had been broken and mended with pieces of pearl shell glued on with breadfruit gum. [284]

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[end plate 9]

9: Greiner E-4 (no date) 1923 OX6 Marquesas OX6



# MARQUESAN DECORATIVE DESIGNS

## INTRODUCTION

[531] Marquesan culture shows a curious disharmony in the development and application of decorative designs. There is a very low development of the textile arts and almost no use of decorative designs in connection with them. Marquesan baskets are unornamented, and the mats when decorated at all show only the simplest checkerwork design used as a border pattern. The ceremonial staves used by the chiefs have a band of fabric at the top made of brown sennit decorated with black hair. The designs on them are mostly simple block arrangements although one staff examined showed series of conventionalized animals probably intended as representations of lizards (Pl. 1, *a*).

The Marquesans did not decorate their tapa as did the Hawaiians, Samoans, Fijians, and in fact most other Polynesians, although in the Bernice P. Bishop Museum there is a single wooden object with a covering of tapa fitted like a glove and decorated with designs common in woodcarving. The designs on this object were painted on the tapa probably because this material afforded a better surface than the wood. The primary purpose was to decorate the figure, not the tapa. It is difficult to understand why the same technique was not employed in decorating tapa used for wearing apparel and bedding.

Although deficient in the art of decorating textiles, the Marquesans developed to a high degree forms of ornamental lashing, carving in stone and wood, and tattooing.

## ORNAMENTAL LASHINGS

[531] The Marquesans made rather an extensive use of ornamental lashings
284 to serve utilitarian purposes. The timbers forming the framework of houses were held together by lashings, the parts of drums were lashed together, stone tools when hafted had to be lashed, and the lashings for these and for other purposes were usually ornamental. The material used
[283] was a flat plaited sennit dyed brown, reddish brown, black, more rarely yellow or bleached white; two colors were commonly used in a single lashing. Few of these ornamental sennit lashings are in existence. Members of the Bayard Dominick Expedition were fortunate in obtaining photographs of two forms used in the construction of a house, and several drums in the collection of the Bernice P. Bishop Museum display a third form. One of the lashings has the appearance of a series of concentric elipses. Another shows diagonal lines coming from two directions crossing and interweaving in the center, the whole bounded on two sides by parallel vertical lines. This design can be almost duplicated in the carving on the

9: Greiner E-4 (no date) 1923 OX6 Marquesas OX6



house posts (Pl. III, *d*). A third design, found on a drum, is a series of concentric diamonds which also is a common house post design. Undoubtedly other forms of ornamental lashings were used but information concerning them is no longer available.

## CARVINGS IN THE ROUND AND IN HIGH RELIEF

The only figures carved in the round or in high relief by the Marquesans are representations of human beings. Large figures are carved in wood and stone; small figures in wood, stone, bone or ivory. Most of the large figures set up in the sacred places to represent gods are carved in the full round. Stone figures carved in the half-round or three-quarters round are set into the facing of stone walls of house platforms and sacred places; wooden figures carved in the full round are used as posts to support the roofs of dwellings. Small figures carved in human bone are used to ornament the handles of many coconut bowls and are used also as ear ornaments. Some ear ornaments are made of whale bone and whale tooth. Wooden staves surmounted by small human figures carved in the full round have been seen, and a number of objects such as fan handles, canoe paddles, war clubs and *popoi* pounders, display human figures carved in high relief.

The convention employed for the figures is that of the tiki. In most of the carvings the head of the tiki is disproportionately large and has as its most prominent feature round or pointed oval spectacle eyes with a high ridge through the center terminating in the ears and the nose. Supra-orbital ridges are generally indicated and these likewise terminate in the ears which on the small figures are usually represented by two connected spirals turned toward each other. On a few specimens only single spirals are seen and on larger figures a projecting longitudinal flange replaces the spiral. The nose is shown in different lengths but is always broad and flat. The mouth is very large and is always open, showing the tongue.

The bone ornaments on the handles of coconut bowls show only the upper half of the body. Below the characteristic head the arms are shown at the sides of the body with the hands resting on the stomach. In one tiki figure the left hand touches the chin and in another the right arm rests on the right shoulder. Some tikis have five fingers on each hand; others have only three or four.

In the portrayal of the complete tiki figure the legs are shown in a semi-squat or flexed position. In figures carved in the full round, the feet are indicated but not the toes; two dolls which do show the toes were probably recently made. The figures are pierced between the legs so as to make them appear as naturalistic as possible. The sex is usually indicated